IN THE CLAIMS

Claim 1(original: Sorbent material having a solid support modified with a fluorinated polymer coating characterized in that the support is substantially modified with the fluorinated polymer coating which is covalently attached to the support and the fluorinated polymer coating is containing at least one functional group.

Claim 2(original): The sorbent material according to claim 1 wherein the support is a porous inorganic material selected from the group comprising inorganic metal oxides, such as oxides of aluminium, titanium, zirconium, silicon oxides, and/or iron oxides.

Claim 3(original): The sorbent material according to claim 1 wherein the support is an organic material, preferably of porous structure such as cross-linked polystyrenes, polyacrylates, and polyethylenes.

Claim 4(currently amended): The sorbent material according to ~~claims 1 to 3~~ claim 1, wherein the organic/inorganic materials having a porous structure show at least a bidisperse distribution of the pore sizes.

Claim 5(original): The sorbent material according to claim 4, wherein the inorganic material with a bidisperse distribution of the pore sizes is obtainable by gelling a mixture of two silica sols having differently sized colloidal silica particles.

Claim 6(currently amended): The sorbent material according to ~~claims 2 and 3~~ claim 2 wherein the support is in particle-like or monolithic membrane-like form.

Claim 7(original): The sorbent material according to claim 1 wherein the support is modified with a perfluorinated or at least partially fluorinated polymer.

Claim 8(original): The sorbent material according to claim 1 wherein the polymer coating is covalently attached to the support via Si-O-C, C-C, C-O-C and other chemical bonds, according to the chemical nature of the support material.

Claim 9(original): Sorbent material according to claim 1, wherein the surface functional groups are selected from the group consisting of hydroxy, amino, carboxyl, linear amides, cyclic amides, bromide, and aldehyde.

Claim 10(original): Sorbent material according to claim 1, wherein the polymer coating has a thickness of preferably 10 to 250 Å.

Claim 11(original): Sorbent material according to claim 1, wherein the polymer coating has a uniform thickness of preferably 10 to 100 Å and micropores of less than 50 Å accessable to water, salts, and low molecular weight substances being non-adsorptive towards nucleic acids and adsorptive towards proteins.

Claim 12(currently amended): Method of obtaining a sorbent material according to ~~claims 1 - 11~~ claim 1, characterized in depositing at lower temperature and/or pressure compared to ambient conditions fluorine containing monomer(s) on the support having surface radicals, and subsequent introduction of at least one second monomer having at least one olefinic moiety and at least one additional functional group.

Claim 13(currently amended): Method of obtaining a sorbent material according to ~~claims 1 - 11~~ claim 12, characterized in deposition of a reaction product of ketone and/or alcohol and a mixture of fluorine containing monomer(s) and at least one second monomer containing at least one olefinic moiety and at least one additional functional group with a subsequent temperature increase.

Claim 14(currently amended): Method according to ~~claims 12 - 13~~ claim 12, wherein the second monomer(s) are preferably vinylacetate, allylalcohol, allylbromide, (meth)acrylic acid, vinylacetic acid, N-vinylpyrrolidone, (di)alkylamine, acrolein, and hydroxyethyl(meth)acrylate.

Claim 15(original): Method according to claim 12, wherein the surface radicals of the support will be obtained by high energy radiation such as X-ray, gamma, UV or by ozone treatment.

Claim 16(currently amended): Method for separation of substances using the sorbent material according to ~~claims 1 - 11~~ claim 1 in a separation process.

Claim 17(original): Method for separation of substances according to claim 16, wherein the substances are nucleic acids and/or proteins.

Claim 18(currently amended): A chromatographic column or cartridge filled at least partially with the sorbent material according to ~~claims 1 - 11~~ claim 1.

Claim 19(original): Method for separation of substances according to claim 16, wherein nucleic acids flow through a chromatographic column or cartridge according to claim 18 without retention while proteins, salts and other low molecular weight substances are retained.

Claim 20(currently amended): A membrane-like device comprising the sorbent material according to ~~claims 1 – 11~~ claim 1, which is embedded in a polymeric matrix, such as a nylon membrane.

Claim 21(currently amended): A device comprising the sorbent material of ~~claims 1 – 11~~ claim 1 in loose form preferably for batch or magnetic separation.

Claim 22(currently amended): A miniaturized device comprising the sorbent material of ~~claims 1 – 11~~ claim 1 for detection and/or separation of bioorganic compounds.

Claim 23(original): Miniaturized device according to claim 21 in form of chips or microreactors.